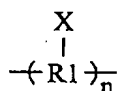


ABSTRACT

A proton conductor or a single ion conductor having high conductivity and a broad operation temperature range, manufacturing methods thereof and an electrochemical capacitor using it are provided. A compound having a structural part of Chemical formula 1 and a compound having a structure of Chemical formula 2 are included. X represents a protoic dissociation group, R1 represents a component including carbon, R2 and R3 represent a component including carbon or hydrogen, and n is in the range of  $n \geq 1$ . By action of the =NCOH group of the compound having the structure of Chemical formula 2, protons can be dissociated from the compound having the structural part of Chemical formula 1 and migrated. Therefore, water retention becomes unnecessary, and high proton conductivity can be obtained in a broad temperature range.

(Chemical formula 1)



(Chemical formula 2)

